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In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A crystal comprising HDM2 amino acid residues 17-111 of (SEQ ID NO:1), ~~or a functional fragment of HDM2,~~ with a ligand, wherein said ligand is a non-peptide small molecule inhibitor of HDM2, wherein said non-peptide small molecule inhibitor prevents HDM2 from interacting with p53.

2. Canceled.

3. (Original) The crystal of claim 1 wherein said crystal has a spacegroup selected from the group consisting of a trigonal spacegroup of $P3_221$ and a tetragonal spacegroup of $P4_32_12$.

4. (Original) The crystal of claim 1, wherein the crystal effectively diffracts X-rays for determination of atomic coordinates to a resolution of at least about 3.0 Å.

5. Canceled.

6. (Original) The crystal of claim 1 wherein said ligand is selected from the group consisting of (4-Chloro-phenyl)-[3-(4-chloro-phenyl)-7-iodo-2,5-dioxo-1,2,3,5-tetrahydro-benzo[e][1,4]diazepin-4-yl]-acetic acid; [8-Chloro-3-(4-chloro-phenyl)-7-iodo-2,5-dioxo-1,2,3,5-tetrahydro-benzo[e][1,4]diazepin-4-yl]-(4-chloro-phenyl)-acetic acid); and derivatives thereof.

7. Canceled.

8. Canceled.

9. Canceled.

10. Canceled.

11. Canceled.

12. Canceled.

13. Canceled.

14. Canceled.

15. Canceled.

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17. Canceled.

18. Canceled.

19. Canceled.

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26. Canceled.

27. Canceled.

28. Canceled.

29. Canceled.

30. Canceled.

31. Canceled.

32. Canceled.

33. Canceled.

34. Canceled.

35. (Currently Amended) An isolated protein fragment comprising a binding pocket or active site defined by atomic ~~sructure~~structure coordinates of HDM2 ~~SEQ ID NO:2~~ amino acid residues 17-111 of SEQ ID NO:1 amino acid residues Ser^{17}, Ile^{19}, Leu^{82} and Arg^{97} in Table 1 or Table 2.

36. (Original) An isolated fragment of claim 35 linked to a solid support.

37. Canceled.

38. Canceled.

39. Canceled.

40. Canceled.

41. Canceled.

42. (Original) A kit comprising a protein molecule fragment of claim 35.

43. (Original) A method for the production of a crystal complex comprising an HDM2 polypeptide-ligand comprising:

(a) contacting the HDM2 polypeptide with said ligand in a suitable solution comprising PEG and NaSCN; and,

b) crystallizing said resulting complex of HDM2 polypeptide-ligand from said solution.

44. Canceled.

45. (Original) The method of claim 43 wherein said PEG has an average molecular weight range from 100 to 1000, wherein said PEG is present in solution at a range from about 0.5% w/v to about 10% w/v and said NaSCN is present in solution at a range of from about 50 mM to about 150 mM.

46. (Original) The method of claim 45 wherein said PEG has an average molecular weight of about 400 and is present in solution at about 2% w/v and said NaSCN is present in solution at about 100 mM.

47. (Original) The method of claim 46 wherein said solution further comprises about 1.8 – 2.4 M $(NH_4)_2SO_4$ and about 100mM buffer.

48. (Currently Amended) A method for the production of a crystal of claim 1 comprising: complexing a peptide comprising a sequence selected from the group consisting

of amino acids 17-111 of SEQ ID NO: 1 with a ~~potential inhibitor~~small molecule; concentrating said complex; and allowing said concentrated complex to crystallize.

49. Canceled.

50. Canceled.

51. Canceled.

52. Canceled.

53. Canceled.

54. Canceled.

55. Canceled.

56. Canceled.

57. Canceled.

(New) A method for the production of a crystal complex comprising:

mixing 1-2 µl of HDM2 protein consisting of amino acids 17-111 of SEQ ID NO: 1 complexed with a small molecule and concentrated to ca. 10 mg/ml in a 1:1 ratio with well solution (1.8-2.4M (NH4)2SO4, 100 mM buffer pH. 6.5-9.0, 2% PEG 400, 100 mM NaSCN);

placing said mixed solution on a glass cover slip;

inverting the glass cover slip and sealing the glass cover slip over a reservoir of 500-1000 µl of well solution;

incubating the glass cover slip at 4°C for from about 3 to about 7 days to permit formation of crystals; and harvesting the crystals.